

REMARKS

In the first Office Action, claims 1-25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hubbard et al., U.S. Patent No. 5,234,987, in view of Weih et al., U.S. Patent No. 6,268,422. Hubbard et al. teach a solvent-based adhesive composition for use on roofing materials. While the Examiner acknowledges that Hubbard et al. do not teach a low VOC composition as claimed, he asserts that it would have been obvious to modify Hubbard's compositions "because the EPA has regulated organic solvent emissions" and because "Weih shows that similarly hydrophobic rubber adhesives can be used in aqueous dispersion form."

Applicants disagree. Neither Hubbard nor Weih provide any motivation for modifying Hubbard. Hubbard et al. do not acknowledge a need for a low VOC adhesive composition, and neither Hubbard et al. nor Weih teach the use of a low VOC solvent which comprises water and a volatile organic compound as recited in claim 1. While Weih discloses the use of water, it is included in an emulsification mixture used for emulsion polymerization; it is not included as part of a solvent as claimed. See Weih col. 5, lines 7-15.

Nor do Hubbard nor Weih teach or suggest the ratio of solvent/water recited in claim 13 and in new claim 26, nor do they teach or suggest the specific primer composition recited in claim 12. Nor do Hubbard nor Weih teach or suggest the inclusion of a plasticizer for the purpose of reducing VOC content. See the specification at page 4, lines 2-4 and new claim 27.

In combining the teachings of the references, the Examiner has used an "obvious to try" rationale which is an improper standard for establishing obviousness. See *In re Deuel*, 34 USPQ2d 1210 (CAFC 1995). The assertion by the Examiner of a generalized desire (EPA regulated solvent emissions standards) does not make obvious applicant's specific composition and use. See, *id.* at 1216 ("A general incentive does not make obvious a particular result, nor does the existence of techniques by which those efforts can be carried out.") There is nothing in the prior art references which suggests adding water to a solvent as a partial replacement for the volatile organic compounds in the solvent for the purpose of obtaining a low VOC solvent, nor is there any teaching in the references which teaches or suggests the benefits of the water/solvent

blend, i.e., increased dry rate, reduced freezing point, and better surface wetting. See the specification at page 4, lines 1-5. Nor do either of the references teach or suggest the specific amounts of components in the low VOC composition.

It is the Examiner's burden to show that 1) there is some suggestion or motivation to combine the reference teachings, 2) there is a reasonable expectation of success, and 3) the combined teachings teach or suggest all claim limitations. See MPEP § 2142. The Examiner has not satisfied this burden. Weih is directed to a completely different process of forming an aqueous adhesive using different preparation techniques and different starting materials from those in the present invention. And, as pointed out above, the water used in Weih is used in an emulsion polymerization (of diene rubber). Further, in Weih's process, the solvent is preferably stripped out after the emulsion polymerization. See col. 4, lines 8-16 and Example 1, col. 11, lines 64-65.

As pointed out above, Hubbard's composition is formed by combining polymers with a VOC solvent, and there is no suggestion in Hubbard et al. of the use of a low VOC solvent, nor is there any expectation of success that Hubbard et al.'s composition would function as a low VOC adhesive composition if modified as taught by Weih.

Even if the teachings of the references are combined, claims 12-21 and 26 would not be met as neither of the references teaches or suggests the specific amounts of components recited in those claims.

Serial No. 10/672,089
Docket No. ADO 0102 PA

-9-

For all of the above reasons, applicants submit that claims 1-25, as amended, and new claims 26-27 are clearly patentable over the cited references. Early notification of allowable subject matter is respectfully requested.

Respectfully submitted,

DINSMORE & SHOHL LLP

By *Susan M. Luna*
Susan M. Luna
Registration No. 38,769

One Dayton Centre
One South Main Street, Suite 1300
Dayton, Ohio 45402-2023
Telephone: (937) 449-6429
Facsimile: (937) 449-6405